Portland Harbor FS Team

FS Review Strategy

Wednesday, February 22, 2012
Portland EPA office
1:00 – 5:00 PM

1.0 Meeting Goals

- Develop strategy for draft FS review
- Define objectives for FS from standpoint of agency decision makers
- Develop processes, activities and tasks to meet objectives
- Define sub workgroups, teams or task leaders for each major task
- Define review schedule and milestones
- Identify resources necessary to complete review
- Review preliminary FS material for compliance with previous requests and completeness
- Identify key issues likely to need resolution as part of the FS

2.0 Key Elements of FS

2.1

The following is based on the Draft TOC FS provided by LWG (except for 2.2.1 Conceptual Site Models, presented as a discussion topic to orient the group based on potential differences in how to address). Is the proposed outline complete?

- Identify key reviewers for each section
- Prioritize efforts

2.1.1 Conceptual Site Models

2.1.1.1 Upstream surface water quality/background sediment quality

2.1.1.2 Stormwater sources

2.1.1.3 Upland sources

2.1.1.4 Groundwater pathway

2.1.1.5 Transition Zone Water

2.1.1.6 Sediment transport

2.1.1.7 Biota

2.1.2 RAOs – Complete?

2.1.2.1 Hot spot vs. Principal Threat Material – Combined Agency position?

2.1.3 PRG/RGs

2.1.3.1 All relevant media addressed?

2.1.3.2 All relevant receptors addressed?

2.1.3.3 All relevant pathways addressed?

2.1.3.4 All relevant agency directives wrt TRVs, BSAF/Rs, FWM, Exposure Assumptions followed?

2.1.3.5 All averaging scales defined and based on applicable receptors?

2.1.4 RAL Development

Is proposed approach sufficient to meet RAOs?

Which RAOs require non-RAL approach? Are the presented in FS?

2.1.5 AOPC and Sediment Management Area Development

2.1.5.1 Development of SMAs

Sufficient areal coverage to meet RAOs?

All COIs addressed?

Hot spot/principal threat material areas identified/addressed?

2.1.5.2 Sub SMA Development

Site Use/Physical Features/Implementability consistent with Agency thoughts relative to handling in FS?

2.1.5.3 Evaluation of Contamination at depth

Erosion potentials (river, prop, wave)

Navigational dredging

Other dredging

2.1.5.4 Transition Zone Water

Application of ARARs

2.1.5.5 Determination of SMA/sub SMA Statistics

Depth of Impact (DOI)

Volumes

SWAC – existing

SWAC – below DOI (if DOI determined at any concentration above non-detect)

Mass of COIs (based on bulk sediment assumptions) – above and below DOI (if DOI is set at anything above non-detect)

2.1.5.6 Area/Volume Sensitivities Uncertainties

2.1.6 Identification and Screening of Remedial Technologies

All relevant applicable technologies identified?

All agency required technologies retained through screen?

2.1.7 Development of Comprehensive Alternatives

All agency required alternatives present?

All alternatives constructed in a way that allows for equitable comparisons against nine criteria?

All pathways and RAOs addressed?

Are source control assumptions applied in a consistent fashion across alternatives?

Is significance of fate and transport model with respect to non-time zero comparisons clearly presented?

Are construction scenarios consistent with respect to relative short term impacts and durations?

Are disposal options fairly assessed?

Are unit costs reasonable and equitable between alternatives?

2.1.8 Detailed Analysis of Comprehensive Alternatives

Are methodologies reasonable and consistent between alternatives?

Are common elements appropriately chosen?

Are detailed analyses consistent on a relative basis between alternatives?

2.1.9 Comparative Analysis of Alternatives

2.1.9.1 Are RAOs fairly compared by sediment, tissue, surface water, and groundwater?

2.1.9.2 Are ARARs met? Potential waivers identified?

2.1.9.3 Do long term trends in COC concentrations in sediment, biota, and surface water seem reasonable? Back of the envelope comparisons to model?

Sediment recontamination potential?

Groundwater?

Downstream transport?

Integration with habitat restoration? How to weight/value?

2.1.9.4 Reduction of Toxicity, Mobility and Volume through Treatment

2.1.9.5 Short-term Effectiveness

Water quality impacts
Sediment recontamination
Downstream transport
Time frame to meet RAOs
"Other" construction impacts – how to weight?
Protection of workers – how to weight?
Disposal

2.1.9.6 Implementability

Technical
Administrative
Availability of services and material
Disposal site

2.1.9.7 Costs

2.1.10 Conclusions

Are alternatives consistent with risk management principles and national guidance?
Risk management decisions and uncertainties
Potential refinements to alternative(s)
Next steps: source control and separate orders

2.1.11 References

Detailed checking or ??

3.0 Assessment of Material Submitted by LWG 2012-01-16

- Do preliminary submittal materials meet what was requested? Are they complete?
- Brainstorming session: What should we do with these materials now to prep for when we get the FS? How to use this material?
    - Models run by Earl – in process
    - New RAL curves
    - GIS maps

Summary of materials submitted by LWG for preliminary FS submittal:

3.1 Review schedule
3.2 PRGs
3.3 Description of Alternatives
  3.3.1 Maps Showing areas of active remediation and identifying technologies
  3.3.2 FS level cost estimates at site-wide and SMA-specific scales
  3.3.3 Active remediation areas, engineered cap areas, in-situ treatment areas, EMNR areas, and dredge/volumes for each alternative at site-wide and SMA-specific scales
  3.3.4 Time to construction completion time estimates
  3.3.5 Graphs of time zero sediment SWAC recovery curves for each Alternative at PRG=specific biologically appropriate scales. PRGs should be shown on the curves. Graphs at 10+ years (for modeled contaminants only)
  3.3.6 Tissue recovery curves for each alternative at PRG=specific, biologically appropriate scales. PRGs should be shown on the curves
  3.3.7 Maps showing QEAFATE predicted sediment concentrations starting at time zero
3.4 Graphs showing short-term water quality exceedances predictions. Include any other model outputs demonstrating construction impacts to surface water and sediment bed downstream
3.5 Maps showing differing bathymetry at highest possible resolution. Maps should be at SMA scale
3.6 Outputs of prop wash scour analysis and visual aids that will be provided in FS and other empirical lines of evidence used to evaluate MNR
3.7 Outputs of recontamination analysis and visual aids that will be provided in draft FS report
3.8 Maps showing Hot Spots as defined by DEQ regulations
3.9 Chart comparing time to construct and meet RAOs for all alternatives
3.10 Chart comparing relative costs for all alternatives

4.0 Data Gaps – anticipated or actual

5.0 Action Items, Next Meeting and Interim Milestones

- FS Review Team assignments, schedules, workload, priorities
- Meeting schedule
- Interim milestones

Initial Parking Lot (Points to meditate on pre- and post-meeting)

- Risk Assessment and Risk Assessors' conclusions vs. draft FS assumptions?
- What are the big issues? What are we really worried about?
    - Is there enough information to go into the ROD?
    - What should we focus on going into the FS review?